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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,537	03/12/2004	Li-Kong Wang	728-228 CON (YOR9-2002-00)	7838
28249	7590	04/11/2006	EXAMINER	
DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. UNIONDALE, NY 11553			CUNNINGHAM, TERRY D	
			ART UNIT	PAPER NUMBER
			2816	

DATE MAILED: 04/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/799,537

Applicant(s)

WANG ET AL.

Examiner

Terry D. Cunningham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 March 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte* Quayle, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2004 and 03 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Summary of changes in this action***

1. Portions of the rejection under 35 U.S.C. § 112, first paragraph has been overcome, responsive to the amendment. Remaining non-enablement is spelled-out below.
2. The amendment overcomes the rejection under 35 U.S.C. § 112, second paragraph.

### ***Specification***

The specification is objected to because page 8, line 7, refers to gate G1 as a “NAND gate”. However, new Fig. 4 shows G1 as an “AND gate”.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Objections***

Claims 1-12 are objected to for the informalities listed below.

In claim 1, lines 11-12, although the language therein is understood, it is not technically accurate to state that the "at least one regulator system" receives the "reference voltage" that is also generates. Thus, it is suggested that "said at least one regulator system receiving said reference voltage and outputting a pump control signal" be changed to --said at least one regulator system outputting a pump control signal responsive to said reference voltage--

Appropriate corrections for the above-discussed objections are required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification fails to adequately describe the circuit of Fig. 4. The operation for the circuit of Fig. 4 is discussed in lines 10-14 of page 8, however this discussion is not consistent with what would be understood by one skilled in the art. Contrary to what is stated in this section, a "voltage having a level equal to  $V_H$  minus threshold drops of FET devices F1 and F2 is provided to the regulator", when transistor F3 is off, rather than when it is on. Since  $V_H$  will forward bias "F1 and F2", such will be on providing  $V_H$  minus the thresholds to regulator 412. Further, contrary to what is stated, a low voltage is provided to regulator section 412 when transistor F3 is on, thus turning off 412.

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In an attempt to resolve this issue, it is suggested that "When either of PCS(x) and CES(x) are 'low', CS(x) switches FET F3 'off' so that no DC current flows to the regulator system 412. When both PCS(x) and CES(x) are 'high', CS(x) switches FET F3 'on' and a voltage having a level equal to  $V_H$  minus threshold drops of FET devices F1 and F2 is provided to the regulator system 412." be changed to -- When either of PCS(x) and CES(x) are 'low', CS(x) switches FET F3 'off' and a voltage having a level equal to  $V_H$  minus threshold drops of FET devices F1 and F2 is provided to the regulator system 412. When both PCS(x) and CES(x) are 'high', CS(x) switches FET F3 'on' so that no DC current flows to the regulator system 412.--

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. §102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 are rejected under 35 U.S.C. §102(b) as being anticipated by Mullarkey (USPN 6,005,812).

With respect to claims 1-12, Mullarkey discloses, in Figs. 1-3, a circuit comprising: "a plurality of local DC voltage generators (see Col. 5, lines 6-11, which state that each device can include a DRAM device 10, as in Fig. 1)", each having "at least one regulator system (27-52 of Fig. 2), a power control unit (16) and a clock control unit (providing Test)", "each regulator system receives a power control signal (CLK)...and a clock control signal (Test) and outputs a "reference voltage (output of 28)" and outputs "a pump control signal (outputs of 46 and 52)" and "a pump system (remainder of Fig. 2) receiving the pump control signal and outputting at

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least one voltage level ( $V_{ccp}$ ) in accordance with the pump control signal", all connected and operating similarly as recited by Applicant.

Examiner has fully considered Applicant's remarks for the above rejection and has not found them to be persuasive. Applicant remarks "Mullarkey merely teaches controlling a single voltage output  $V_{ccp}$ ". Examiner disagrees with this statement. As discussed above, Mullarkey discloses plural "local DC generators". This would provide for one  $V_{ccp}$  for each "DC generator". Applicant further appears to be arguing that the output inverter 28 is not a "reference voltage". However, there is nothing in the record attempting to establish what is meant by a "reference voltage". Clearly, the signal at node  $V_1$  of Fig. 4 is merely one having a high or low level, wherein the high level is voltage dropped from  $V_H$ . The output from inverter 28 is one having a high or low level. Thus, Examiner contends that it is deemed reasonable to consider the output of 28 as being a "reference voltage".

Further, Applicant remarks concerning statement made in the parent case by the Examiner. However, this statement has no relevance or bearing since the claims discussed in the parent application were of entirely different scope and significantly more limited.

Thus, the rejections in view of Mullarkey are hereby maintained.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

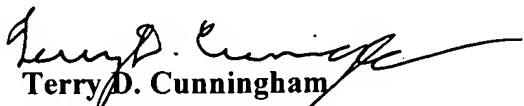
***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terry Cunningham whose telephone number is 571-272-1742. The examiner can normally be reached on Monday-Thursday from 7:30 to 6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy P. Callahan can be reached on 571-272-1740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TC  
April 10, 2006

  
Terry D. Cunningham  
Primary Examiner  
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